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**PATENT ABSTRACTS OF JAPAN**(21) Application number: **10372373**(51) Intl. Cl.: **C07K 17/08 A61P 1/14 A61K 38/00**  
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states:(71) Applicant: **KYOWA HAKKO KOGYO CO LTD**(72) Inventor: **SUZAWA TOSHIYUKI**  
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(74) Representative:

**(54) LONG-ACTING TYPE  
DIGESTIVE TRACT  
MOVEMENT PEPTIDE**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To obtain a compound (salt) having digestive tract movement activity excellent in persistency, useful for treating a diabetic stomach anesthesia, torporific intestinal blockage, etc., by bonding a polyalkylene glycol to a peptide having digestive tract movement activity.

**SOLUTION:** One or more polyalkylene glycols such as a polyalkylene glycol of the formula [R1 is an alkyl or an alkanoyl; M1 is (OCH<sub>2</sub>CH<sub>2</sub>)<sub>r</sub>-(OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub> (r and s are each an integer of  $\geq 0$ ); X1 is a single bond or a (CH<sub>2</sub>)<sub>t</sub> (t is 1-5); R2 is a group having reactivity to a peptide having digestive tract movement activity or the like] are bonded to the peptide having digestive tract movement activity such as motilin directly or through a spacer such as cysteine. The

polyalkylene glycols have preferably 1,000-1,000,000 average molecular weight. Preferably, the dose of the compound (salt) is 25-500  $\mu\text{g}$  per adult daily.

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